

A.1.79

Exercise A.1.79 Determine the domain of the variable x in the expression $\frac{x}{x+4}$.

Solution

By Note A.1.D, we cannot divide by 0 nor can we take square roots of negatives. In the given expression, there are no square roots but there is division. So we find the "bad" value(s) of x by setting the denominator of the expression equal to 0: $x+4=0$ or $x=-4$.

So the domain of x is

all real numbers except for -4 .

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